

OUR DRINKING WATER IS REGULATED

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U. S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what’s in your drinking water.

Special Notice

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk for infections. You should seek advice about drinking water from your physician or health care provider.

ALL Drinking Water May Contain Contaminants

When drinking water meets federal standards there may not be any health benefits to purchasing bottled water or point of use devices. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2013, our system lost an estimated 41,504,057 gallons of water. If you have any questions about the water loss audit please call 713-662-8170.

DROUGHT CONTINGENCY AND WATER CONSERVATION PLAN

The City of Bellaire has a Drought Contingency Plan should a drought or other event occur. Here are the stages:

Stage 1—Annual Drought and Conservation Awareness Campaign

From May 1 through October 31 of each year, the City of Bellaire seeks to increase customer awareness of water conservation and encourage the most efficient use of water.

Stage 2—MILD Water Shortage Conditions

When Average Daily Water Usage reaches 65% of safe distribution capacity for three (3) consecutive days, water customers are requested to **voluntarily** limit the irrigation of landscaped areas to even-numbered days for customers with a street address ending in an even number, and odd-numbered days for water customers with a street address ending in an odd number, and to irrigate landscapes only between the hours of 12:00 a.m. to 3:00 a.m. and 9:00 p.m. to 12:00 a.m. on designated watering days.

Stage 3—MODERATE Water Shortage Conditions

When Average Daily Water Usage reaches 70% of safe distribution capacity for three (3) consecutive days, the following **mandatory** lawn-watering schedule shall be implemented. Customers with even numbered addresses may water on Sundays and Thursdays. Customers with odd numbered addresses may water on Saturdays and Wednesdays. Watering shall occur only between the hours of 12:00 a.m. to 3:00 a.m. and 9:00 p.m. to 12:00 a.m. on designated watering days.

Stage 4—SEVERE Water Shortage Conditions

When Average Daily Water Usage reaches 80% of safe distribution capacity for two (2) consecutive days, the City will **ban** the use of water not essential for public health or safety including: Watering lawns and shrubs, street washing, washing driveways and automobiles, water hydrant flushing, filling swimming pools, athletic field watering.

After five (5) consecutive days of water usage below the triggering factors of the Stage, the Drought Contingency Plan reverts to the previous Stage.

Some helpful tips to conserve water:

- Do not water lawns daily. *(Do not overwater or allow water to run off to street; change timers on sprinklers to water after midnight.)*
- Check your swimming pool to make sure it is not overfilling.
- Check for and repair detectible water leaks as soon as possible.
- Keep showers under five minutes.
- Turn water off while brushing teeth.
- Replace older-model showerheads and faucets.
- Limit washing vehicles.

Your cooperation will help ensure that water supplies are maintained at maximum levels and prevent the need to impose more restrictive measures to conserve water.

For more information, go to <http://ci.bellaire.tx.us/index.aspx?NID=1009>



Public Participation Opportunities:

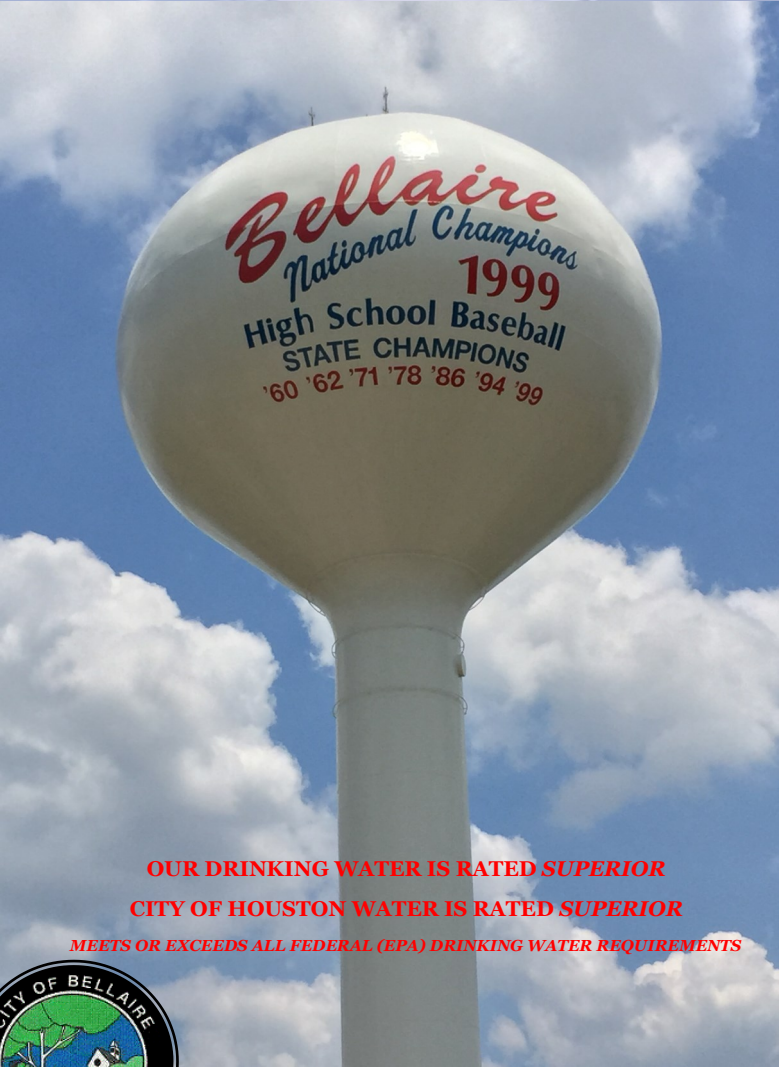
Public input concerning the City of Bellaire water system may be made at:
4401 Edith
Bellaire, TX
Monday - Friday
9:00 am - 3:00 pm
Contact: City of Bellaire
713-662-8170

En Espanol:

Este informe incluye informacion importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en espanol, favor de llamar al tel. 713-662-8170 para hablar con una persona bilingue en espanol.

City of Bellaire

Annual Drinking Water Quality Report
2016



OUR DRINKING WATER IS RATED SUPERIOR
CITY OF HOUSTON WATER IS RATED SUPERIOR
MEETS OR EXCEEDS ALL FEDERAL (EPA) DRINKING WATER REQUIREMENTS



PWS ID # TX1010004

Source of Drinking Water

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pickup substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800)426-4791.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salt and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Secondary Constituents: Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern.

Where Do We Get Our Drinking Water?

The source of drinking water used by the City of Bellaire is 53% Surface Water supplied by the City of Houston's East Water Purification Plant, and 47% Ground Water from the Evangeline Aquifer. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies. Some of this source water assessment is available on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWWW/>. For more information on source water assessments and protection efforts at our system, please contact us.

Definitions and Abbreviations:

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Picocuries per liter (pCi/L): A measure of radioactivity.

Parts per million (ppm): The equivalent of milligrams per liter (mg/L) is analogous to 1 minute in 2 years.

Parts per billion (ppb): The equivalent of micrograms per liter (ug/L) is analogous to 1 minute in 32 years.

NA: Not applicable.

¹ *Arsenic - While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral know to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.*

² *Unregulated **contaminants** are those which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Any unregulated contaminants detected are reported in the following table. For additional information and data visit <http://www.epa.gov/safewater/ucmr/ucmr2/index.html> or call the Safe Drinking Water Hotline at 800-426-4791.*

***About This Report:** The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are solely based on this susceptibility and previous sample data. Any detections may be found in this Consumer Confidence Report.*

Regulated Contaminants:	YEAR	MCL	MCLG	RANGE Min-Max Level	Violation	Likely Source of Contamination
Inorganic Contaminants						
Arsenic ¹ (ppb)	2014	10	0	5.6 - 5.6	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium (ppm)	2014	2	2	0.162 - 0.162	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride (ppm)	2014	4	4	0.66 - 0.66	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (ppm)	2016	10	10	0 - 0.52	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion from natural deposits.
Nitrite (ppm)	2015	1	1	0 - 0.01	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion from natural deposits.
Beta/photon emitters (mrem/yr)	2011	4	0	0 - 0.43	No	Decay of natural and man-made deposits. <i>The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.</i>
Combined Radium 226/228 (pCi/L)	2011	5	0	1 - 1.1	No	Erosion of natural deposits.
Gross alpha (pCi/L)	2011	15	0	0 - 4.9	No	Erosion of natural deposits.
Synthetic Organic Contaminants						
Simazine (ppb)	2016	4	4	0.16 - 0.16	No	Runoff from herbicide used on row crops.

	YEAR	MCL	MCLG	RANGE Min—Max Level	Viola- tion	Likely Source of Contamination
Disinfection Byproducts						
Total Haloacetic Acids	2016	60	None	13.5 - 56.7	No	By-product of drinking water chlorina- tion.
Total Trihalomethanes	2016	80	None	22.7 - 48	No	By-product of drinking water chlorina- tion.

	YEAR	Average Level	RANGE Min—Max Level	MRDL	MRDLG	Violation	Likely Source of Contamination
Disinfectant							
Chloramines and Chlorine (ppm)	2016	1.36	1.12 - 1.52	4	4	No	Water additive used to control microbes..

	AVG	RANGE
Unregulated Contaminant Monitoring Rule²		
[VOC] Chloroform (ppb)	19.5	16 - 23
[VOC] Bromodichloromethane (ppb)	8.45	7.8 - 9.1
[VOC] Dibromochloromethane (ppb)	1.95	1.9 - 2.0
Alkalinity, Total as CaCO3 (ppm)	113	96 - 130
Aluminum (ppm)	na	0.0307

Unregulated (Continued)	AVG	RANGE
Bicarbonate (ppm)	138.5	118 - 159
Calcium (ppm)	43.1	41.3 - 44.9
Chloride (ppm)	29.5	27 - 32
Chromium, Hexavalent ³ (ppb)	3.44	1.2 - 6.5
Hardness, Total as CaCO3 (ppm)	124.5	122 - 127
Magnesium (ppm)	4.05	3.52 - 4.58
Manganese (ppm)	0.009	0.0056 - 0.0129

Unregulated (Continued)	AVG	RANGE
Nickel (ppm)	0.0024	0.0019 - 0.0029
pH (SU)	7.6	7.6
Potassium (ppm)	3.71	3.36 - 4.06
Sodium (ppm)	25.2	16.3 - 34.1
Solids, Total Dissolved (ppm)	218.5	200 - 237
Sulfate (ppm)	27	26 - 28
Zinc (ppm)	n/a	0.0293

³ *The federal drinking water standard for total chromium is 100 ppb. Chromium-6 and Chromium-3 are covered under the total chromium drinking water standard because these forms can convert back and forth in water and in the human body, depending on environmental conditions. Measuring one form may not capture all the chromium that is present. In order to ensure that the greatest potential risk is addressed, EPA's regulation assumes that a measurement of total chromium is 100 percent chromium-6, the more toxic form. To assess levels of chromium-6 in drinking water, EPA is requiring a selected number of systems to perform chromium-6 monitoring under the third Unregulated Contaminant Monitoring Regulation (UCMR 3). The UCMR 3 requires many but not all public water systems to monitor for chromium-6 for a one-year period. The City of Bellaire is not required at this time to monitor for chromium-6, but has voluntarily analyzed for chromium-6 during 2016. For additional information contact the City of Bellaire.*

City of Houston

	MCL	MCLG	AVG	MAX
Contaminants				
Atrazine (ppb)	3	3	0.19	0.22
Barium (ppm)	2	2	0.08	0.11
Copper (ppm)	1.3	1.3	0.002	0.002
Fluoride (ppm)	4	4	0.39	0.43
Nitrate (ppm)	10	10	0.22	0.26
Turbidity				
Turbidity (NTU)	**	N/A	0.17	0.31
** Lowest Monthly Percentage of Samples <0.3 NTU: 100%				

Total Coliform: Reported monthly tests found no Coli-form bacteria.

Total Coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease causing organisms; therefore, the absence from water is a good indication that the water is microbially safe for human consumption.

	YEAR	MCLG	90 th %	ACTION LEVEL (AL)	# OF SITES EXCEEDING AL	Violation	Likely Source of Contamination
Lead & Copper							
Lead (ppb)	2015	0	1.3	15	0	No	Corrosion of household plumbing systems; Erosion of natural depos- its.
Copper (ppm)	2015	1.3	0.57	1.3	0	No	Erosion of natural deposits; Leach- ing from wood preservatives; Corrosion of household plumbing systems.